SOME NEW SPECIES OF LEPIDOPTERA.

By THE HON, WALTER ROTHSCHILD.

1. Grapta bocki sp. nov.

(Pl. XI., fig. 7.)

9. Similar to G. gigantea Leach; but differs in the following characters:

Upperside: both wings without the two marginal lines met with in G. gigantea, the black colour much larger in extent, so that the ochreous markings (which are rufous in G. gigantea) are much reduced in size, and not connected with each other on the forewings.

On the underside the disc of the wings is tawny olive, the marginal bluish zigzag line stops at the discal nervule on the hindwings, and, on the forewings, borders only the deep median sinus of the wing; the white mark of the anterior wings as in G. gigantea, that of the hindwings standing in shape between the mark of G. gigantea and G. c-aureum (L.).

Expanse: 2.75 inches = 70 mm.

Hab. Interior of China (west of Ishang).

Named in honour of the collector.

2. Charaxes tavetensis sp. nov.

J. Closely allied to Ch. cacuthis Hew. from Madagascar, in size, colour, and style of marking; but differs in the much narrower pale blue band of the forewings, consisting of three distinctly separated marks, the anterior of which between the second and third branch of the median nervure is small; the band of the hindwings is posteriorly as broad as in Ch. cacuthis, but the anterior half from the discal nervule to the costa is strongly narrowed, and being widely interrupted on the nervules dissolved into two small spots; the two small white spots on the hindwing between the branches of the subcosta, close to the inner margin of the blue band, are absent in the new insect, which has only one white spot beyond the middle of the costa like Ch. ctesipe Godt.; the submarginal white spots of the hindwing are a little larger than in Ch. cacuthis.

On the underside the parts which are greenish olive in Ch. cacuthis are blackish brown in my new form; the cellule between submedian nervure and posterior branch of the median one is almost entirely washed with blackish brown, and the brownish black semicircular mark of this cellule found in Ch. cacuthis is dissolved in Ch. tavetensis sp. nov. into two rather widely separated transverse streaks, the outermost of which reaches the submedian nervures, while the innermost is abbreviated halfway to that nervure, both streak-like markings include each a narrow brown spot at the base; in the next cellule there are two brown bars margined with black, approximate and sometimes even confluent posteriorly in Ch. cacuthis, while in Ch. tavetensis sp. nov., these markings are parallel and not approximate; the brown bar of the following cellule again stands much farther from the angle of the cellule in the new species than in Ch. cacuthis; the inner row of black spots crossing the apical half of the forewing is curved in Ch. cacuthis, and approaches posteriorly

the above-mentioned brownish black semicircular mark, while it runs almost straight to the submedian nervure in my species. Underside of the hindwings almost exactly marked as in the species from Madagascar.

Expanse of wings: 3.54 inches = 90 mm.

Hab. Taveta (East Africa).

3. Charaxes mixtus sp. nov.

(Pl. XI., fig. 8.)

3. Upperside: both wings dark blue or brownish black, when viewed from different sides. Forewings with a curved median row of four or five light blue spots, the first of them stands near the end of the cell; a second row, situated towards the apical margin of the wing, consists of two white spots near the costal margin and some very faint light blue spots, the last of which alone, near the anal angle, is obvious; outer margin feebly marked with white between the nervules.

Hindwings with a row of semilunar light blue spots crossing the disc, posteriorly approaching the anal angle, with a submarginal row of small white spots, and a

marginal pale blue line, interrupted at the nervules.

Underside: both wings drab colour, disc a little darker. Forewings with a submarginal row of marks, namely: one double spot in the anal angle, and a rounded one in the second cellule, both black, interiorly bordered with a yellowish lunule each, which itself is margined at the discal side with black, exteriorly bordered with pale blue; three indistinct blackish spots in the median cellules, interiorly bordered with yellowish colour, then two white spots corresponding to those on the upper surface; cell crossed by three black lines; a thin line near the apex of the cell, a transverse band between the third branch of the median nervule and the submedian nervule, consisting of three lunular marks, and two linear markings inside this band, of a black colour.

Hindwings with a number of black linear markings; two lines crossing the cell, stopping at the median nervule, and a quite irregular row of short markings crossing the disc; a row of lunular slightly yellowish olive spots, the posterior of which situated in the anal angle and marked with two blackish lines like the preceding one; a submarginal row of white point-like spots which bear exteriorly—chiefly the posterior ones—a blue and black mark.

Tails of the hindwings moderately long and thin.

Expanse of wings: 3.7 inches = 94 mm.

Hab. Lukolele (N. Congo).

Similar to Ch. numenes Hew. on the upperside, but differs in the hindwings having an almost continuous marginal pale blue band; the underside is nearly marked as in Ch. tiridates Cram., but the two black lines crossing the cell are not united at their ends as in that species. The tails of the hindwings are much longer than in Ch. numenes Hew., but shorter than in Ch. tiridates Cram.

4. Charaxes bipunctatus sp. nov.

3. Upperside of both wings dark blue. Anterior wings with a median row of four light blue spots, the two first are situated near the end of the cell; and with a small white spot behind the costal margin at the beginning of the apical fifth. Apical margin yellowish between the nervules. Hindwings with a small light blue spot behind the middle of the costa, and

with two transverse rows of spots of the same colour, the outer row consists of seven very small markings with a white centre, the inner one of two spots situated not far from the two first of the exterior row; apical margin with yellow double spots in the cellules, these spots form a narrow marginal band which is interrupted at the nervules and is bordered exteriorly with a brownish black line.

Underside of both wings dark olive buff, tinged with yellow. wings with three narrow black cellular streaks, the exterior of them flexuose; discocellular nervules thinly bordered with black scales; a thin short line near the apex of the cell, two rather broad bar-like markings behind the cell, and a transverse row of three angular marks between the median nervules and submedian nervure, black; a double mark in the anal angle, and a feeble spot in the next cellule also black, bearing interiorly a yellowish olive, lunular marking each; a white spot near the costal margin corresponding to the spot on the upper surface; some faint submarginal lunules of a pale olive buff colour; all the black markings bordered with light blue. Posterior wings with a number of very thin black lines: one basal, short; the second between costal margin and median nervure, crossing the basal half of the cell, interrupted at the nervures; the third extending from the costa to the median nervure again, crossing the apical half of the cell, flexuose, scarcely interrupted at the nervures; the others, short, standing in a quite irregular transverse row, which begins in the middle of the costal margin and ends at the inner margin rather close to the anal angle; beyond the middle of the disc there are some yellowish olive buff marks the posterior of which are bordered inside and outside with black; a submarginal row of very small spots, light blue, each spot bearing a white point behind; outer margin marked as on the upperside, but the yellow spots paler.

Posterior wings shortly dentated, even more shortly so than in Ch. numenes Hew.

\$. Upper and under surface of the forewings almost exactly marked as in Ch. tiridates Cram., but the basal half of the upperside of a paler wood brown colour.

Upperside of the hindwings wood brown like the base of the forewings; apical and inner margins brownish black; a small spot of grey scales beyond the middle of the costa; two or three ill-defined submarginal spots of a buff colour anteriorly at the inside of the blackish marginal area; in this area is a row of faint bluish grey spots; outer margin with buff markings.

Underside as in Ch. tiridates Cram.

Tails of the hindwings very short. Expanse: 3, 3.9 inches = 100 mm.

9, 4.7 , = 120 ,,

Hab. West Africa, probably Gold Coast.

The male differs from Ch. tiridates Cram. and Ch. numenes Hew, in the absence of the exterior row of blue spots from the forewings, in the inner row on the hindwings consisting of two spots only, and in the pattern of the under surface. Both sexes have the hindwings very shortly toothed.

5. Teracolus bipartitus sp. nov.

?. Upperside: forewings yellowish white (Naples yellow), more than the apical third black; this black part rather deeply bisinuate on the disc, including

a submarginal row of three yellowish white spots, one near the costal margin, the third, largest, near the anal angle, and the second, smallest, midway between them; apical margin with faint linear yellowish marks in the cellules; radial nervules black; base of both wings somewhat blackish.

Hindwings yellowish white; apical half black, with a transverse row of vellowish white spots gradually decreasing towards the anal angle.

Underside: forewings in pattern like the upperside; but the basal two-thirds almost ochre yellow, the apical angle vinaceous rufous, the marginal yellow spots larger, and the submarginal row of markings consisting of a doubled spot at the costal margin, a small spot each in the discal cellules, and a larger spot, near the anal angle.

On the hindwings, the basal half lemon yellow, with a faint transverse brownish line; apical half light vinaceous rufous, marked as the upperside, but the spots larger.

Expanse: 1.8 inch = 46 mm.

Hab, With (East Africa).

Allied to T. amina (Hew.) (Exot. Butterft., iii., Pieridae, Pl. VIII., figs. 1, 2, 3); but the black colour on the upperside is much larger in extent, and is bisinuate on the disc of the forewings; T. amina has only a marginal row of yellowish spots on the hindwings, while in my new species there is an additional subdiscal row of spots. On the underside Hewitson's species has a red discal patch on the forewings which is absent from T. bipartitus; the black and vinaceous rutous colour of the apical third is much more extended in the new form, and the yellowish spots are reduced in size; the hindwings which are marked with a submarginal brownish band and a discal, interrupted, brownish line in T. amina (Hew.), have the apical half vinaceous rufous in my species, with a subdiscal and marginal row of yellowish marks.

6. Teracolus chromiferus sp. nov.

J. Upperside: both wings white, nervales of the forewings feebly blackish, veins of the hindwings white. Forewings with a black spot at the end of the cell; apex of the wing lake red, this red patch bordered with black at the costal and marginal sides, not so towards the disc.

Underside: forewings white, apex chrome yellow, a black spot at the end of the cell, as on the upperside.

Hindwings chrome yellow, with a small black spot at the apex of the cell, a discal row of very faint black point-like marks, two of them more obvious, one at the costal margin, the other towards the anal angle; base of the costal margin narrowly bordered with orange chrome.

Expanse: 2.95 inches = 75 mm.

Hab, Zambesi River.

Comes nearest to *T. buctoni* Butl. The red patch of the apex of the forewings is smaller in extent; the veins of the forewings are white for the most part, those of the hindwings entirely white, while in *T. buxtoni*, as well as in *T. anax*, the veins are black; on the under surface the forewings are yellow at the apex, and the hindwings, which have a very faint tint of yellow and scarcely a trace of black markings in *T. buxtoni*, are entirely yellow in the new species, and their disc is almost marked as in *T. anax*.

7. Peridroma fasciata sp. nov.

3 Y. Upperside: forewings dark wood brown, crossed by two blackish zigzag lines, one situated at the base of the cell, the other outside the reniform mark; the latter, as well as the orbicular spot, obvious: a very indistinct blackish band runs rom the inner margin close to the end of the external zigzag line across the reniform mark to the costa; the marginal fringe of hairs of the colour of the wingbut with the extreme base of the hairs vellowish.

Hindwings greyish cream buff, crossed beyond the middle by a slightly waved, narrow, blackish band.

Underside: forewings greyish buff at the base, darker grey towards the outer margin, with a hair brown transverse streak in the apical half.

Hindwings pale buff, with a hair brown band corresponding to that of the forewing. Head and collar almost russet; thorax grey wood brown; abdomen cinnamon.

Expanse: 1.85 inch = 47 mm.

Hab, Midway 1.

Closely allied to *P. crinigera* Butler, from which it chiefly differs in the hindwings being pale buff and crossed by a hair brown band.

8. Peridroma evanescens sp. nov.

δ ?. Upperside: forewings dark wood brown, with a brownish black reniform mark, which is indistinct in some examples: between this mark and the outer margin is a faint zigzag line; another line is sometimes visible in the basal half; orbicular spot obvious or wanting; outer margin darker brown between the nervules.

Hindwings pale greyish buff, slightly darker near the outer margin and on the veins; outer border narrowly margined with dark brown in the ?, of a buff colour in the d.

Underside: both wings uniformly greyish buff, hindwings a little paler than the forewings.

Head and collar cinnamon; thorax greyish wood brown; abdomen varying from pale buff to pale clay colour.

Expanse: 3, 1.4 inch = 36 mm. , 9, 1.85 ., = 47 mm.

Hab. Laysan I.

This form is also similar to *P. crinigera* Butler, but the hindwings are much paler, the markings of the forewings are faint, and in most examples hardly visible.

9. Prodenia laysanensis sp. nov.

3. Upperside: forewings cream buff, parti-coloured with blackish brown and grey, usually darker in the female than in the male, with one transverse whitish streak on the extreme base, then with an irregular row of three more or less arched whitish marks, one situated at the costal margin, one at the inner margin, and the third midway between them, but a little nearer the base; middle of the wing bears an irregular blackish longitudinal patch, bordered towards the costa with a black hair-like line, which is deeply incurved near the apex of the cell; that patch sometimes extends to the base; outside the patch is one transverse blackish brown zigzag line, exteriorly bordered with greyish white, and a submarginal, scarcely waved, and at the apex of the costal slightly incurved line of a whitish buff colour, the space between these two lines darker than the outer margin.

Hindwings pale wood brown, with the fringe of the outer margin whitish buff.

Underside: whitish cream buff, slightly dusky, with the middle of the primaries. and a submedian faint band, crossing both wings, a little more dusky.

Head and collar wood brown; thorax more grey; abdomen whitish buff.

Expanse: 3, 1.4 inch = 36 mm.

9, 1.65, = 42 mm.

Hab. Laysan I.

Distinguished from P. littoralis (Boisd.) by the pattern of the primaries and the wood brown colour of the secondaries.

Limbatochlamys gen. nov.

Allied to Calleremites Warren (see p. 384), but body robust, apex of forewings pointed, antennae (3) biserially pectinate.

Type: L. rosthorni sp. nov.

10. Limbatochlamys rosthorni sp. nov.

(Pl. XII., fig. 9.)

Upperside: forewings olive buff; costal margin broadly bordered with cream buff, this cream buff border freckled with dark scales and posteriorly terminated by a hairlike black line; disc with a transverse row of feeble darker olive points standing on the nervules; marginal fringe white.

Hindwings cream buff, shadowed with dark scales, and feebly tinged with olive buff towards the outer margin; fringe of the latter white; disc crossed by one blackish lunulate line; cell with a blackish sublunular mark at the apex.

Underside: both wings ochreous buff, more cream buff towards the outer and posterior margins; outer one-third of the auterior, and onter two-thirds of the posterior wings freekled with black scales; a straight line crossing the disc of the forewings neither reaching the costal nor inner margin, and a cellular spot, black.

Thorax olive buff, with a narrow transverse band of a cream buff colour behind

Expanse: 3.15 inches = 80 mm.

Hab. Interior of China (probably districts west of Ishang).

Named after the collector.

11. Hypochrosis pulchraria sp. nov.

(Pl. XII., fig. 10.)

Upperside: both wings pinkish buff, mottled with short fine rays of dark green scales; forewings tinged with orange at the costal margin; the latter with a dark oil green spot before the middle; a large discal mark of the same dark oil green colour, extending from the subcostal nervure to the inner margin, is narrowed towards the inner margin, and externally somewhat bent inwards before the submedian nervure; a small linear marginal spot behind the apex of the wing, and a submarginal very short flexuose line, which stands in a brownish ill-defined patch before the anal angle, dark olive green.

Hindwings pale cream buff at the outer margin; a narrow median transverse band, anteriorly abbreviated, and a basal rather large mark, which is more or less rounded, of the green colour of the discal area of the forewings.

Underside ochrous rufous; forewings with a linear spot at the end of the cell, and with an ill-defined patch in the anal angles, black.

Expanse of wings: 1.97 inch = 50 mm.

Hub. Shillong and Cherrapungi (Assam., October and November 1893.

EXPLANATION OF PLATE XII.

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Att. to et aking de Mr. ' W